# OFFICE OF EMERGENCY SERVICES LAKE COUNTY SHERIFF'S OFFICE

# 2021

# LAKE OPERATIONAL AREA

**Lake County Emergency Operations Plan** 

**Earthquake Annex** 

**Liquefaction Annex** 

**Volcano Annex** 

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For

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## I. PURPOSE

The purpose of this Contingency Plan is to establish priorities, responsibilities and assign tasks with respect to coordinated response operations in mitigating effects upon property, life and the environment during major seismic or volcanic activity in the Lake Operational Area (OA). This Contingency Plan is to be used as a field responder guideline up to the activation of the Emergency Operation Center.

# II. SPECIAL SITUATION

The Lake Operational Area is susceptible to major earthquake impact both from several fault lines and the long-standing dormancy of Mt. Konocti volcanic activity. Seismic activity will cause a variety of damages, depending upon the impact zone. Damage may range from temporary power and utility outages, structure collapse, roadway failures to dam and reservoir failures. Disruption to normal daily activities will be imposed upon the medical service community, emergency services and educational facilities.

# III. CONCEPT OF OPERATIONS

# 1. General

This contingency plan specifically addresses the entire spectrum for support operations and functions related to seismic and volcanic activity from relatively minor incident(s) to a large-scale disaster impact. While there may be warning events associated with a volcanic eruption; an earthquake may occur with little or no advanced warning, thus requiring immediate deployment, coordination and mobilization of resources. All departments and agencies of the County must be prepared to promptly and effectively respond to earthquake impacts, taking all appropriate actions, including request and providing mutual aid. The County response under this contingency plan is based on four phases of operation.

- a) Increased Readiness
- b) Initial Response Operations
- c) Extended Response Operations
- d) Recovery Operations

# 1. Contingency Plan Activation

The Lake Operational Area Emergency Services Director shall activate this plan when CalOES has issued an earthquake or volcanic eruption warning with possible impact upon Lake County.

## 2. Increased Readiness

This phase will be initiated by the receipt of a warning or the observation that accomplished during this phase include, but are not necessarily limited to an emergency situation is imminent or likely to occur soon.

# 3. Initial Response

Lake County's initial earthquake & volcano impact response activities are primarily performed at the field response level. Emphasis is placed on departmental response operations under the Incident Command System (ICS).

Priority will be given to the following operations:

- a) Evaluate the situation if the incident can be controlled without requesting resources from outside of the Lake Operational Area.
- b) The County is either minimally impacted or not impacted at all and is requested to provide mutual aid to other jurisdictions within the County or to other communities.
- c) Make all necessary notifications; personnel etc.
- d) Coordinate the dissemination of warning, emergency public information and instructions to citizens with Lake County Sheriff's Office of Emergency Services.
- e) Conduct evacuations and/or rescue operations.
- f) Assess need for mutual aid assistance.
- g) Coordinate and implement precautionary evacuations in potentially impacted areas.
- h) Restrict movement of traffic and people to closed affected areas.
- i) Identify potential release of hazardous materials into high impact areas.
- j) Mobilize personnel and pre-positioning resources and equipment.
- k) Develop a Department Incident Action Plan (IAP) and implement the Incident Command System.
- I) Evaluate and coordinate a possible request for a Proclamation of a Local Emergency with the Lake County Sheriff's Office of Emergency Services.
- m) When department resources are committed to the maximum and additional resources are required, request for mutual aid will be initiated through proper channels and coordination with Lake County Sheriff's Office of Emergency Services.
- n) Issue materials as required, utilizing a document tracking system.
- o) Document all actions taken. Document all assigned personnel names and time cards.

# IV. EARTHQUAKE THREAT

The primary, large scale threat to Lake County is an earthquake. A major earthquake occurring along the California, North Costal Region could result in high casualties, extensive property damage, fires, flooding, hazardous material incidents and other ensuing hazards. The geology of the Northern California Coastal Region is distinct from the rest of California. Geologist and seismologists find the region of special interest because of the San Andreas Fault, which is within 30 miles to the west, the Hayward Fault and Rogers Fault extension into the Mayacamas Fault which is within 10 miles to the west of Lake County. Throughout Lake County there are several small active faults with most centered in the Cobb Mountain area. Minor earthquakes occur almost daily in the south county geothermal fields near the geysers influenced region. A major threat to the entire Northern California region is the Mendocino Triple Junction in Humboldt County, where three plates, the Gorda, the North American and the Pacific plates are in contact. The region is part of the Cascadia Subduction Zone (CSZ) and vulnerable to an earthquake up to the 9.0 magnitude range. The CSZ runs from the Cape Mendocino area of Humboldt County to the north of Vancouver Island off British Columbia, Canada. As evidence of the high potential of seismic activity in the region, the Berkeley Seismographic Station catalogues of California seismicity consistently show that the Northern Coastal Region to be the most seismically active in the state.

Historic records indicate that at least 50 damaging earthquakes have occurred since the mid-1800 time period. The intensity recorded at a location will be dependent on the magnitude and type of earthquake, the ground acceleration, duration of the shaking, distance from the epicenter and the type of earth materials that underlie the location. The intensity is measured according to the Mercalli Intensity Scale, which ranges from I (Not Felt) to XII (Extreme). Of the major historic earthquakes recorded on the North Coastal region, 23 of them have had intensities of VII to VIII. Within this range of intensity, poorly to moderately well designed buildings may suffer structural damage (including partial collapse), liquefaction of some saturated sediments and potential ground rupture.

California North Coastal Region, specific hazards include:

- a) Ground failure in the coastal lowlands, resulting in damage to foundations and utility lines.
- b) Fires associated with damaged electrical and gas lines.
- c) Landslides, affecting transportation and communication routes.
- d) Ground rupture.
- e) Damage to bridges and overpasses.

# **Modified Mercalli Intensity Scale:**

Intensity Description
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I Not Folt	Net felt avecat by your fevr under conscielly feverable conditie :
I. Not Felt	Not felt except by very few under especially favorable conditions.
II. Weak	Felt only by a few people at rest, especially on upper floors of building.
III. Weak	Felt quite noticeable by people indoors, especially on upper floors of buildings.
	Many people do not recognize it as an earthquake. Standing motor cars may rock
	slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV. Light	Felt indoors by many, outdoors by few during the day. At night, some awakened.
	Dishes, windows, doors disturbed; walls make cracking sound. Sensation like
	heavy truck striking building. Standing motor cars rock noticeably.
V. Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken.
	Unstable objects overturned. Pendulum clocks may stop.
VI. Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of
	fallen plaster. Damage slight.
VII. Very Strong	Damage negligible in building of good design and construction; slight to moderate
	in well-built ordinary structures; considerable damage in poorly built or badly
	designed structures; some chimneys broken.
VIII. Severe	Damage slight in specially designed structures; considerable damage in ordinary
	substantial building with partial collapse. Damage great in poorly built structures.
	Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture
	overturned.
IX. Violent	Damage considerable in specially designed structures; well-designed frame
	structures thrown out of plumb. Damage great in substantial buildings, with
	partial collapse. Buildings shifted off foundations. Liquefaction.
X. Extreme	Some well-built wooden structures destroyed; most masonry and frame
	structures destroyed with foundations. Rails bend.
XI. Extreme	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad
	fissures in ground. Underground pipe lines completely out of service. Earth
	slumps and land slips in soft ground. Rails bent greatly.
XII. Extreme	Damage total. Waves seen on ground surfaces. Lines of sight and level distorted.
	Objects thrown upwards into the air.

# 1. Potential Range of Damage

Every few seconds an earthquake occurs somewhere in California. The vast majority of these quakes cause little or no damage. Earthquakes of 6.5 magnitude or greater (generally considered moderate to heavy damage quakes) occur within the state on an average of once every four years. The last 8.0 magnitude earthquake in the state was the 1906 San Francisco earthquake. The October 17, 1989

Loma Prieta earthquake has been described as a 7.1 Richter magnitude earthquake, and caused extensive damage in the Santa Cruz and the San Francisco Bay areas. Earthquakes may range in intensity from barely noticeable tremors to violent shocks. For the purpose of the contingency plan, earthquakes will be divided in four categories based on local damage:

# a) No Damage Earthquake:

Ground, motion causes no damage (e.g., no deaths, 6 or less injured; no structural collapse; or no failure of communications, transportation or utility systems).

# b) Light Damage Earthquake:

Ground motion causes isolated damage (e.g., one or more deaths; 6 or more injured; one or more structures suffering partial or complete collapse; or any failure of communications, transportation or utility systems).

# c) Moderate Damage Earthquake:

Ground motion causes widespread damage (e.g., several deaths; several injuries; several structures suffering partial or complete collapse; or major failure of communications, transportation or utility systems).

# d) Heavy Damage Earthquake:

Ground motion causes catastrophic damage (e.g., large number of deaths; large number of injuries; large number of structural collapses; or long-term failure of communications, transportation or utility systems).

Following a light-to-heavy damage earthquake, "after-shocks" are common and may last for days, weeks or months intermittently. These after-shocks are usually less intense but can be as damaging as the primary shock wave due to weakened structures. Occasionally, an after-shock's magnitude may be greater than the initial event, and may change the designation of the initial event to a "fore-shock." The actual movement of the ground in an earthquake is seldom the direct cause of death or injury. The majority of casualties result from falling objects, flying debris and building collapse triggered by ground motion.

# 2. Building Collapse – Rescue Operation

General factors leading to structural collapse will include the earthquake intensity, ground water content, bedrock deformation, liquefaction potential, distance from fault fracture zone and actual building construction. Structures that will most commonly receive damaged and fail during the earthquake will be un-reinforced masonry type construction, particularly those that are two or more stories in height. Main characteristics leading to failure in such buildings are high rigidity, low tensile and shear strength and low capacity for bearing reversed loads and stresses. The collapse of such buildings is often responsible for casualties and priority rescue operations. Several such structures exist in populated and commercial areas in Lake County. Structural hazards that often cause casualties will include falling bricks, plaster, un-braced cornices, parapets and architectural ornamentation as well as flying glass and interior objects.

Wood framed structures, predominant in residential areas throughout Lake County, are moreflexible than masonry and are typically able to withstand large deformations produced by moderate to major

earthquake impacts. Weak points of such structures, particularly in pre-1950 construction, are the connections between sill pates and foundations. During major earthquakes, older frame structures have slippedoff their foundations. Even well-constructed buildings may "sink" during a major earthquake if foundations are built in areas susceptible to liquefaction; in alluvial soils and high water content areas. Additionally, mobile and pre-fabrication homes that are not strapped down will displace off their under bracing and foundations. It is projected that several of these earthquake weak structures will partially or fully collapse during a widespread major earthquake impact throughout Lake County.

There will be a high demand placed upon the Lake County Fire-Rescue Services for light and heavy urban rescue operations throughout the Operational Area.

#### Mass Casualties – MCI

It is assumed that an earthquake would easily produce casualty numbers that will exceed and overwhelm Lake County Fire-Rescue Services, medical resources and the two hospitals. Types of predominate injuries will include fractures, cuts, internal trauma, neurological damage, cardiac arrest, burns, shock, etc.

Triage, treatment and transport of the serious injuries in the field and Causality Collection Point (CCP) will likely be the primary initial activity of all available medical personnel from Lake County Fire Service Departments and community volunteers from allied health professionals and other advance live support providers.

Establishing Casualty Collection Points will require significant logistical support. Even with all available doctors, nurses, emergency medical technicians, paramedics, pharmacists, chiropractors, dentists, veterinarians, first responders, etc. from throughout, Lake County will have a significant shortfall of personnel and supplies compared to casualties. Initial treatment of injuries will be heavily dependent on individual self-help first aid from the surviving general population.

# 4. Hospital Disruptions

Sutter Lakeside and Adventist Health Clearlake Hospitals are anticipated to structurally survive a heavy damaging earthquake however; internal shaking will cause flying objects and disruption. It must be anticipated that there will be an influx with large numbers of walking wounded seeking medical services. These will likely cause medical staff to be immediately overloaded and remain so for several hours. Increased demand upon these facilities may force prioritization of patients and diversion to out-of-county facilities. Facilities may be required to operate on generators, which may limit their available resources.

# 5. School Disruptions

Lake County school facilities and student campus population will be affected following a major

earthquake. It is anticipated that serious injuries will result from flying glass and unsecured interior objects. School facilities within the Operational Area have been built in accordance with the "Field Act;" which requires seismic safety integrity. It is anticipated that school campuses may be disrupted; and some schools may need to be closed. Further it is anticipated that school facilities will be utilized for mass care shelters and/or causality collection points for the population within the community.

#### 6. Hazardous Material Release

It must be anticipated that several minor to moderate hazardous material spills or release will occur. It should be anticipated that release and spills will be at facilities such as petroleum storage plants and retail stations, waste treatment plants (releasing raw sewage) and/or water treatment plants developing chlorine leaks. School and hospital laboratories and general retail stores or other fixed facilities that store, sell or use chemicals may also be the source of spills. It is also anticipated that spills may occur from vehicle accidents along earthquake affected state highways and county roads. As a result of such releases following the earthquake and the magnitude of other priorities initial responders should only attempt to identify the materials, contain and isolate the release and if necessary evacuate or establish in placing sheltering.

#### 7. Structure Fires

Structure fires must be anticipated following the impact of a major earthquake. Structure fires will likely occur shortly after a heavy damaging earthquake. Causes of such fires will be from propane line ruptures, electrical shorts, downed power lines and/or flammable liquid spills. Additionally, normal water supply to suppress fires may be disrupted or unavailable. It should be anticipated the general fire protection systems to structures (e.g., sprinklers, detectors, flow systems) will be ineffective due to associated water supply, power and structural integrity failures.

During widespread and overwhelming structure fires deployment, suppression activities will need to be prioritized based on life safety threats, availability of water and the availability of resources from the Lake County fire services.

## 8. Utility Systems

Normal utility systems will fail or be disrupted for long periods of time following a major widespread damaging earthquake.

a) Propane and Gas Lines: Distribution line ruptures and/or failures will more likely occur at service connection points to structures. Underground distribution lines may only suffer light damage, however, significant line failures will occur in the interior zones of structures at non-flexible connections.

- b) <u>Electrical Systems:</u> Transmission distribution lines will be affected from overhead line failure. Structural failure of mounting poles and substation equipment placements will additionally contribute to power failure and disruptions. Lattice-type steel tower supporting major transmission lines have an inherent earthquake resistance, however they can collapse under extreme and motion impact. Ironically, fires may be caused by premature restoration of electrical power. It should be anticipated that a majorityof structures in Lake County do not have emergency generator capabilities and can be expected to be without power for several hours and/or days. Additionally, emergency generators may fail due to inadequate bracing and/or being knocked off their foundations.
- c) <u>Water Systems:</u> Distribution service lines should be anticipated to rupture and/or fail entering structures. Localized damage to pumping stations and storage facilities is anticipated. Water contamination must be anticipated and will require purification. Additionally, importation of water from outside sources may be required for several weeks to months. Long term, widespread water rationing may require priority consideration.
- d) <u>Waste Treatment Systems:</u> It should be anticipated that waste treatment systems will suffer damage affecting treatment plan operations. Numerous breaks in small and large lines, as well as general overloading of such system may result in the release of raw sewage, which will present a significant health hazard. Additionally, chlorine tank rupturing and/or falling from damage is a serious hazard consideration.
  - i. Northwest Wastewater Treatment Facility Lyon's Creek reservoir contains reclaimed wastewater from the Northwest Regional Wastewater Facility located about 1.5 miles northwest of the City of Lakeport and is 1.7 miles from Clear Lake. Access is from Highway 29 west of the City of Lakeport. The dam is an earth structure on a tributary to Lyon's Creek and Clear Lake. Capacity of the reservoir is 870 acre-feet. Sixteen pumping stations serve this facility, all which are subject to lake or high groundwater inundation. Additionally, pumping stations from the Lakeport Municipal District can reroute to this system.
  - ii. Southeast Wastewater Treatment Facility
    Burns Valley reservoir contains reclaimed wastewater from the
    Southeast Regional Wastewater Facilities located 1.5 miles northeast of
    Clear Lake just outside the boundary line of the City of Clearlake. Access
    is from Highway 53 north of the City of Clearlake. This reservoir is an
    earth structure on a tributary to Burns Valley Creek and Clear Lake. The
    capacity of the reservoir is 560 acre-feet.
  - iii. Kelseyville Wastewater Treatment Facility

The facility is located on Gaddy Lane near the intersection of Clark Drive in Kelseyville, approximately 2.5 miles from Clear Lake. The capacity of the reservoir is 65 acre-feet. The collection system is served by eight lift stations near Clear Lake. Each lift station has and alarm system and a receptacle for emergency backup power. There are two additional wastewater treatment facilities governed by Special District Boards, which serves shoreline communities.

# iv. City of Lakeport Municipal Sewer District

The City of Lakeport operates a wastewater treatment plant on Parallel Drive, southwest of downtown Lakeport. The wastewater treatment plant is approximately 1.6 miles from Clear Lake. The wastewater collection system has nine pumping stations, three of which are located within 30 to 60 feet of Clear Lake. The pumping stations have alarms of occurrences such as pump failure, power failure or communications failure. Treated water is stored in a 650 acre-foot reservoir during winter months.

#### 9. Dam-Reservoir Failure

Dam or reservoir failures can result from structural damage or total collapse. Seismic activity may also cause inundation by the action of seismically induced wave that overtops the dam without causing failure of the dam, but causing significant flooding downstream.

The major dams, reservoirs and diversion levees in Lake County with high inundation zones are:

Dam Name: Cache Creek Dam

Lake Name: Clear Lake

Dam Owner: Yolo County Flood Control and Water Conservation District

Phone Number: (530) 662-0265 Dam Height: 35 feet high – Concrete

The Cache Creek Dam is located 5 miles downstream of the outlet from Clear Lake. The dam is concrete, gravity-type structure. The relationship between Clear Lake and the dam is unique in that the dam does not control maximum overflows form Clear Lake. The channel between Clear Lake and the dam controls maximum outflows.

Dam Name: Scott Dam

Lake Name: Lake Pillsbury-Eel River

Dam Owner: Pacific Gas & Electric (PG&E)

Phone Number: 888-743-4911 Capacity: 93,724 Acre-Feet

Height of Dam: 80 Feet with a crest of 250 feet

Scott Dam is located on the upper Eel River in the Mendocino National Forest. It can be reached

through Potter Valley, Mendocino County or Elk Mountain Road from Upper Lake, Lake County. Dam failure inundation zones include Mendocino County communities and the Cities of Rio Dell, Fortuna and Ferndale in Humboldt County to the Pacific Ocean.

Dam Name: **Indian Valley Dam**Lake Name: Indian Valley Reservoir

Dam Owner: Yolo County Flood Control & Water Conservation District

Phone Number: 530-662-0265 Capacity: 300,600 Acre-Feet

Height of Dam: 211 feet above streambed

Indian Valley Dam is located approximately 5 miles north of Highway 20 between Clear Lake and Williams, Colusa County. It can be reached by Walker Ridge Road to the Chalk Mountain area. He dam is an earthen structure and is the largest dam in Lake County. Dam inundation zones include the Spring Valley Development and downstream on Cache Creek into Yolo County Populated areas.

Dam name: Coyote Creek Dam

Dam Owner: Hidden Valley Lake Association

Phone Number: 707-355-0026 Capacity: 3,300 Acre-Feet

Coyote Creek Dam is located east of Highway 29 between the communities of Lower Lake and Middletown at the Hidden Valley Lake residential area. Dam failure inundation zone includes as many as 500 residents, an elementary school and a strip mall that includes a grocery store.

Dam Name: Highland Creek Dam

Dam Owner: Lake County Flood Control and Water Conservation District

Phone Number: 707-530-1500 Capacity: 3,500 Acre-Feet

Highland Creek Dam is located approximately 0.5 miles west of Adobe Creek Dam. The dam can be reached on Highland Spring Road, Bell Hill Road or the Old Toll Road. The dam is an earthen structure.

Dam Name: Adobe Creek Dam

Dam Owner: Lake County Flood Control and Water Conservation District

Phone Number: 707-530-1500

Capacity: 695 Acre-Fee

Adobe Creek Dam can be reached via Adobe Creek Road. Dam failure inundation zones include Adobe Creek areas and the community of Finley.

## Kelsey Creek Detention Structure

The Kelsey Creek Detention Structure is a groundwater recharge facility and is located 1 mile north of Kelseyville. It can be reached from Finley East Road. Failure of the structure would result in a sudden surge in Kelsey Creek, however, over bank flows and flooding would not necessarily occur. The structure is normally open during high flow events.

# 10. County Transportation System

It is anticipated that a damaging earthquake will disrupt normal transportation systems throughout Lake County causing severe traffic management problems as well as delay emergency vehicle response, evacuations and logistical support resources for several hours. Failure or partial failure of bridges and their approaches, particularly those on soft ground will require evaluation and temporary ramping before their use and would inhibit traffic flow in many areas. The primary cause of surface transportation failure may be landslides and mud deformation. Significant impairment of State Highways 20, 29, 175 and 53 will isolate Lake County. Surface street/road blockage by debris will cause delays and temporary road closures. Lampson Air Field in Lakeport runways may be sufficiently intact and able to handle air support and heavy aircraft (military C-130) used for emergency response. It should be anticipated that air traffic will increase due to an influx of news media. Air space restrictions may be required.

#### 11. Landslides

Landsides include all movements of soil, rock or debris as a result of falling, sliding or flowing. The triggering cause may be seismic activity. An untimely occurrence of a large earthquake during or soon after a sustained period of moderate to heavy activity could produce a landslide problem of monumental proportions. Debris flows and associated storm-triggered landslides have caused most of the deaths and much of the structural damage attributed to land sliding in California. Such incidents have occurred frequently in the past and as growth and development place more people, more structures and more roadways in areas susceptible to landslides, the potential destruction and cost of seismic or annual weather related landslides become greater and greater. During major seismic activity, debris avalanches and debris flows may be triggered in both rural and urban areas, smashing structures, blocking roads, severing utilities and water supply and injuring or killing people. Damage control and disaster relief may be required from local agencies, private organizations and the state and federal governments. Emergency operations may be seriously hampered by the closure of major highways and main roads and the loss of communications. Evacuation of dangerous areas may be necessary. Extensive efforts may be required to rescue trapped persons, recover bodies, remove debris, and assist in reestablishing vital public services and utilities and offercontinuing care and shelter to effected citizens. Lake County lies with contrasting topographic setting, steep hills and ridges. The hills and ridges to the southeast are characterized by very steep slopes and by sharp differences in the strength and stability of the geological materials underlying the surface soils. These differences are generally expressed by the lack or presence of landslide deposits which are widely, but unevenly distributed on the slopes. Most landslide damage has taken place within pre-existing landslide deposits. Lake County could be isolated if State

Highways 20, 29 and 175 were impacted by landslides or large debris flow. Landslides constitute one of the principal hazards to structures, roads and utilities. A typical soil debris avalanche in Lake County involves a few hundred cubic yards of soil and colluvium and is the result of total saturation. Specialnote is given to the Cache Creek Slide Zone. Lake County Sheriff's Office of Emergency Services has a Cache Creek Pre-Emergency Action Plan for evacuations and property protection. The potential movement of the slide is monitored by gauges above and below the slide on Cache Creek.

#### 12. Evacuation

Evacuation priority may be required due to a potential dam failure, hazardous material spill or widespread fires. However, since some transportation systems may be disrupted for several hours, consideration must be given to increased time required to evacuate and to the viability of helicopter or foot evacuations. During evacuations, mass care shelter locations are required for final destination evacuees.

# 13. Displaced Homeless Citizens

It is anticipated that a significant number of displaced or homeless citizens will occur following a major earthquake. A considerable number of citizens will probably be self-sufficient in nature (e.g. tenting in front yard, temporarily living with relative or neighbors, etc.). An estimated 20% of the displaced homeless will require public sheltering as provide by the American Red Cross and will require significant logistical support. Considerations may be required for medium to long-term housing for the displaced.

## 14. Public Health Hazards

Potential outbreak of communicable disease and other health hazards must be anticipated following a major earthquake, particularly during on-going rescue operations. It is also anticipated that the large numbers of fatalities will create a high demand for several temporary field morgues.

# 15. Communication Systems

It is anticipated that a damaging earthquake will immediately knock out most of the telephone system. Telephone equipment would be adversely affected primarily by overloading (postearthquake calls in and out of Lake County), and complicated by physical damage and condition of equipment such as displaced handsets. Essential service lines may survive, but will not primarily be relied upon for emergency response agencies. A higher percentage of dedicated landlines are anticipated to survive as compared to the normal telephone system and essential service lines. Lake County's radio system has been seismically braced at the Sheriff's Office Communication Center and at its mountaintop repeater sites. Following a major earthquake, the radio system is expected to be operational. A major factor reducing radio efficiency following an earthquake is the inundation of non-essential radio traffic and lack of radio discipline. Additionally, due to Lake County topography, several radio dead spots normally exist. Effective radio communications may require the

augmentation of ACS personnel and/or the use of "car-to-car" relay systems. In the absence of emergency power to some agency based stations, portable radios may be the only available means of radio communications.

# 16. Public Warning/Alert and Notification

The Office of Emergency Services is responsible for public warning efforts during the preparedness phases of a disaster, as well as the alert and notification needs during a disaster response. The Public Information Officer (PIO) within the Command Staff of the County EOC is the representative within the OES staff who is responsible for public information efforts. With the approval of the EOC Director, the PIO will disseminate emergency messages to the public regarding preparedness measures to take, evacuation areas and routes (if applicable), emergency resources, measures that Sheriff's OES is taking during the event and recovery assistance information.

# 17. Building Inspections

It is anticipated that Lake County will be required to immediately deploy inspection and assessment teams following a major earthquake. Building inspections of critical facilities like hospitals, schools, designated massshelter sites and government structures will be required in order to safely allow usage.

# V. VOLCANO

# **Mount Konocti Volcano**

Mount Konocti is part of the Cascade Range, a chain of volcanoes that runs from Northern California into British Columbia. Mount Konocti is one of sixteen areas in California identified as likely to experience a volcanic eruption. Recent volcanic deposits dating only a few thousand years ago and the presence of geothermal resources suggest an event should be included as an identified threat.

The effects of an eruption of Mt. Konocti would be similar in nature to those of a significant local seismic event; but may also include significant ash-fall, pyroclastic flows and hot, potentially toxic gas flows.

Virtually the entire population of the southern County may be required to relocate until the eruption subsides. Contact and coordination with the adjacent Counties of Mendocino, Napa, Solano Colusa and Yolo would be required to facilitate traffic and mass care for evacuees.